

AUG 01 2002

Special 510(k) Summary: Line Extension to the Xia Spinal System**Submission Information**

Name and Address of the Sponsor of the 510(k) Submission: Howmedica Osteonics Corp
59 Route 17
Allendale, NJ 07401-1677

Contact Person: Karen Ariemma
Regulatory Affairs Specialist

Date of Summary Preparation: June 28, 2002

Device Identification

Proprietary Name: Xia Spinal System

Common Name: Spinal Fixation Appliances

Classification Name and Reference: Spinal Interlaminar Fixation Orthosis,
21 CFR 888.3050
Spinal Intervertebral Body Fixation Orthosis
21 CFR 888.3060
Pedicle Screw Spinal System
21 CFR 888.3070

Predicate Device Identification

The Xia Stainless Steel System consists of Monoaxial and Polyaxial Screws, Washer, Hooks, Blocker, Rods, Connectors and Multi-Axial Cross Connectors (MACs). The Xia Spinal System consists of Monoaxial and Polyaxial Screws, Hooks, Blockers, Rods, Washer and Connectors.

Description of Device Modification

This submission is intended to address a material modification to the Xia Stainless Steel Hooks. The subject components, named the Xia Titanium Hooks, are a line extension of the Xia Spinal System. The predicate Xia Stainless Steel Hooks are fabricated from stainless steel. The subject Xia Titanium Hooks are fabricated from titanium alloy. In addition, dimensional changes were made to the Xia Stainless Steel Hooks to create the subject Xia Titanium Hooks.

Intended Use:

The Xia Spinal System, which includes the subject Xia Titanium Hooks, and the Xia Stainless Steel System are intended for use in the noncervical spine. When used as a pedicle screw fixation system, the Xia Spine System and Xia Stainless Steel Systems are intended for patients: (a) having severe spondylolisthesis (Grades 3 and 4) at the fifth lumbar - first sacral (L5-S1) vertebral joint; (b) who are receiving fusions using autogenous bone graft only; (c) who are having the device fixed or attached to the lumbar and sacral spine; and (d) who are having the device removed after the development of a solid fusion mass.

When used as a pedicle screw fixation system, the Xia Spinal System and Xia Stainless Steel Systems are also intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine: degenerative spondylolisthesis with objective evidence of neurologic impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudarthrosis).

When used as an anterior screw fixation system or a posterior hook and sacral/iliac screw fixation system, the Xia Spinal System and Xia Stainless Steel Systems are indicated for patients with degenerative disc disease which is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies, spondylolisthesis, fracture, spinal stenosis, spinal deformities such as scoliosis, kyphosis, lordosis, tumor, pseudoarthrosis or revision of failed fusion attempts.

Statement of Technological Comparison:

The Xia Titanium Hooks share the same intended use and basic design concepts as that of the predicate Xia Stainless Steel Hooks. Mechanical testing demonstrated comparable mechanical properties to the predicate device.



Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

Ms. Karen Ariemma
Regulatory Affairs Specialist
Howmedica Osteonics Corp
59 Route 17
Allendale, New Jersey 07401-1677

AUG 01 2002

Re: K022160
Trade Name: Xia Titanium Hooks
Regulation Number: 21 CFR 888.3070, 21 CFR 888.3060, 21 CFR 888.3050
Regulation Name: Pedicle Screw Spinal System, Spinal Intervertebral Body Fixation
Orthosis, Spinal Interlaminar Fixation Orthosis
Regulatory Class: Class II
Product Code: MNI, MNH, KWP, KWQ
Dated: June 28, 2002
Received: July 3, 2002

Dear Ms. Ariemma:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

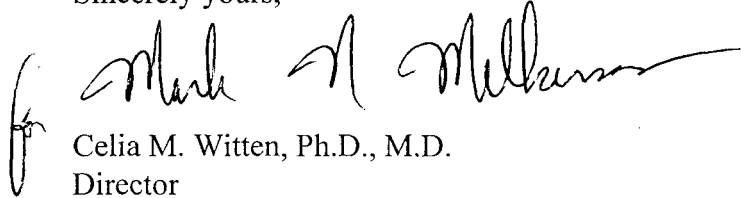
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsmamain.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten", is written over a horizontal line. To the left of the signature is a small, stylized mark that looks like a lowercase "f" or a checkmark.

Celia M. Witten, Ph.D., M.D.
Director
Division of General and
Restorative Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

510(k) Number (if known): K 022160Device Name: Xia Spinal System

The 6 mm diameter rods from the Osteonics® Spinal System and Opus Spinal System are intended to be used with the other components of the Xia Spinal System.

Indications For Use:

The XIA Spine System is intended for use in the noncervical spine. When used as a pedicle screw fixation system, the XIA Spine System is intended for patients: (a) having severe spondylolisthesis (Grades 3 and 4) at the fifth lumbar - first sacral (L5-S1) vertebral joint; (b) who are receiving fusions using autogenous bone graft only; (c) who are having the device fixed or attached to the lumbar and sacral spine; and (d) who are having the device removed after the development of a solid fusion mass.

When used as a pedicle screw fixation system, the XIA Spine System is also intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine: degenerative spondylolisthesis with objective evidence of neurologic impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudarthrosis).

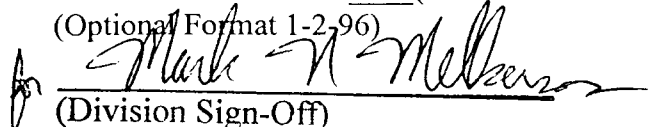
When used as an anterior screw fixation system or a posterior hook and sacral/iliac screw fixation system, the XIA Spine System is indicated for patients with degenerative disc disease which is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies, spondylolisthesis, fracture, spinal stenosis, spinal deformities such as scoliosis, kyphosis, lordosis, tumor, pseudoarthrosis or revision of failed fusion attempts.

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use _____

OR

Over-The-Counter Use _____ (Per 21 CFR 801.109)
(Optional Format 1-2-96)

(Division Sign-Off)

Division of General, Restorative
and Neurological Devices

510(k) Number K022160